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36.

(New) A method for conveying data communications network management information to an umbrella management system, said method comprising:

- subscribing to network management information events published on said information bus;
- receiving said network management information events;
- converting said network management information events into umbrella management system information useable by said umbrella management system; and
- communicating said umbrella management system information to said umbrella management system.

ARGUMENTS

Claims 1-30 are pending in the present application. The Examiner is thanked for his kind allowance of claims 17-19, 23, 28, and 29. The specification has been amended to correct grammar and correct numbers in the specification to correspond to the drawings.

New claims 29-36 have been added and are supported in the specification, drawings, and claims. Claims 29-32 are supported in the specification on page 21, FIGs. 5A and 5B, and are similar to claims 20-22. Claims 33-36 are supported in the specification on page 21, FIGs. 5A and 5B, and are similar to claims 24-26. Thus, no new matter has been added.

Attached hereto is a marked-up version of the changes made to the specification and claims by the current amendment. The attached page is captioned "Version with markings to show changes made."

35 U.S.C. §103(a) Rejection

According to M.P.E.P. § 2143,

To establish a *prima facie* case of obviousness, three basic criteria must be met. First there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in the applicant's disclosure.

Claims 1-16, 20-22, 24-27 stand rejected under U.S.C. 103(a) as being unpatentable over McHann (U.S. Patent No. 5,991,806) in view of Bracho et al (U.S. Patent No. 5,873,084). This rejection is respectfully traversed.

a. There Is No Suggestion or Motivation

There is no suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify or combine Bracho to McHann's system.

McHann discloses a message router **104** (i.e., system controller or server **810**) for the computer system **800**, as shown in Fig. 8. The system controller/server **810** "receives messages in different formats and converts the messages into a common format for usage

in system management and administration." (Col. 9, lines 31-34). The server **810** (or event-monitor application **1100**) sends the formatted messages or events over the network **802** to a selected network management system (column 12, lines 27-32). This allows each system component or device to use its own message format without modifying or installing software, yet utilizes information contained in such messages for various management purposes. However, as the Examiner has acknowledged, McHann does not teach or suggest publishing and subscribing to network management information events.

Bracho teaches a basic publishing/subscribing system in which a publisher and a subscriber are connected to a network through a hub (column 3, line 65 to column 4, line 4). Such a hub is also referred to as an information broker or broker, as is well known to those of ordinary skill in the art. In order to employ the publishing/subscribing scheme described in Bracho, the publishers and subscribers must use the predefined interface procedures in accordance with an Application Programming Interface (API) (column 2, lines 25-30) and agree in advance on a predetermined set of event types (column 4, lines 53-56). Furthermore, in order for the events to make sense, the publishers and subscribers need to understand each other, and typically a standard specification language is used to define events (column 5, lines 39-43).

Thus, if Bracho's teachings should be used to modify McHann's system to employ publishing/subscribing scheme, as the Examiner alleges, all components and devices in McHann's system **800** and the system controller/server **810** must use the predefined interface procedures in accordance with an API, agree in advance on a

predetermined set of event types, and use a standard specification language to define events or messages. However, predefining interface procedures and agreeing on event types between each system device and the server 810 would destroy all advantages of McHann's system, in which the system components and devices can simply send messages in a different format to the system controller/server 810, without modifying or installing software.

The Office Action states that "Bracho specifically states that his publishing/subscribing scheme is an improved system for any "enterprise system" which integrates heterogeneous systems (col. 1, lines 54, col. 2, lines 30-36). However, as discussed above and upon a detailed reading of McHann, McHann teaches a system of routing messages for a computer system without having to modify or install additional software. Furthermore, as discussed above and upon a detailed reading of Bracho, Bracho requires additional software, specifically, the predefined interface procedures, API.

Accordingly, even though Bracho teaches a publishing/subscribing system, those of ordinary skill in the art would not modify McHann with Bracho's teachings or combine the two systems.

b. There Is No Reasonable Expectation Of Success

The alleged combination of McHann and Bracho would not realize the claimed invention. The claimed invention, as in claim 1, provides for a method which includes publishing the network management information as network management events on an information bus, subscribing to the events at a monitor interface, receiving the events at

the interface, converting the events into umbrella management system information useable by the umbrella management system, and communicating the umbrella management information to the umbrella management system. Thus, the claimed method does not simply send and receive events at the interface, but fully employs the publish/subscribe scheme for transmitting and receiving the events.

The alleged combined invention would require the use of the predefined interface procedures in accordance with an API, agreement in advance on a predetermined set of event types, and use of a standard specification language to define events or messages. Moreover, as further described below, Bracho lacks the monitor interface as claimed in the claimed invention. Rather, Bracho merely teaches the use of a hub in its publishing/subscribing system and not a monitor interface. Thus, there is no reasonable expectation of success that the combination of McHann and Bracho would result in the claimed invention.

c. The Prior Art References Do Not Teach Or Suggest All of The Claim Limitations

The claimed invention, as in claim 1, provides for "subscribing to said network management information events at a monitor interface in communication with said information bus" and "receiving said network management information events at said interface." The "monitor interface 66 is in communication with information bus 42 and an umbrella management system 68. . . . Without the monitor interface 66 serving as a link between the information bus-based network management system and umbrella management system 68, the network management application 72 associated with

umbrella management system 68 will not have the capability to access the information found in the events." (page 15, lines 5-16).

This monitor interface is not taught or suggested in McHann or Bracho. Specifically, the Office Action equates the interface with a "hub interface." However, as known to those of ordinary skill in the art, the hub is also referred to as an information broker or broker and is not the same as a monitor interface. The broker does not perform the same functions nor is a broker known as a monitor interface.

Thus, the cited prior art can not be said to make the claimed invention obvious. In view of the above, it is respectfully asserted that the claims are now in condition for allowance.

d. **Remaining Independent and Dependent Claims**

As stated in the Office Action, the language of claims 20-22 and 24-27 is much the same as claim 1 and these claims were rejected on the same rational as claim 1. Thus, the same arguments discussed above are equally applicable here.

Moreover, all dependent claims depend from independent claims 1, 20, 24, or 27 and thus include the limitations of their respective corresponding base claim. The base claims being allowable, the dependent claims must also be allowable.

In view of the foregoing, it is respectfully asserted that the claims are now in condition for allowance.

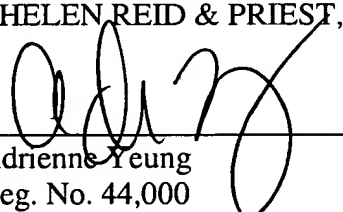
Request for Allowance

It is believed that this Response places the above-identified patent application into condition for allowance. Early favorable consideration of this application is earnestly solicited.

If, in the opinion of the Examiner, an interview would expedite the prosecution of this application, the Examiner is invited to call the undersigned attorney at the number indicated below.

Dated: 12/3, 2001

Respectfully submitted,
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Version with markings to show changes made

Specification

Paragraph beginning at page 10, line 21 was amended as follows:

In accordance with a presently preferred embodiment of the present invention an Enterprise Application Integration (EAI) system is used to broker the flow of information between the various services and adapters comprising the data networked management system of the present invention. The use of EAI systems in networked environments is well known by those of ordinary skill in the art. An example of an EAI system that can be incorporated in the presently preferred invention is the ActiveWorks Integration System, available from Active Software of Santa Clara, California. As shown in FIG. 3, such an EAI system 80 uses an information broker 82 as the hub of the system. The information broker 82 acts as the central control and storage point for the system. The information broker 82 can reside on a server and serves to mediate requests to and from networked clients; automatically queuing, filtering and routing events while guaranteeing delivery. The information broker 82 is capable of storing subscription information and using such subscription information to determine where published information is to be sent. Referring back to FIG. 2, the information broker 44 is shown located at a point along the information bus 42. In most instances the broker will be located within the same NOC 36 as the host 34 that runs the NCC 32 application. Another key feature to the EAI system 80 is the use of adapters 84 that allow users of the EAI system 80 to integrate diverse applications and other information when using the integration system. Adapters 84 provide bi-directional mapping of information between the [an] application's native format and integration system events, enabling all custom and packaged applications,

databases, and Internet and extranet applications to exchange information. As shown in FIG. [2] 3 the adapters 84 run on the various services 86, network nodes 88 and the monitor interface 90 of the presently preferred embodiment of the present invention. These adapters 84 publish and subscribe to by way of the information bus 92 that has its hub at the broker 82.

Claims

Claims 29-36 have been added as follows:

29. (New) A method for conveying data communications network management information to an umbrella management system, the method comprising:

subscribing an adapter to an information bus to capture network management events;

formatting said events into an umbrella management system information by a converter in communication with said adapter;

conveying said umbrella system information to said umbrella management system by a forwarder in communication with said converter.

30. (New) The method of claim 29 further comprising:

selecting certain information from certain network management events, said filter in communication with said adapter.

31. (New) The method of claim 29 further comprising:

transmitting events across said information bus by a publisher in communication with said adapter.

32. (New) A program storage device readable by a machine, tangibly embodying a program of instructions executable by the machine to perform a method for conveying data communications network management information to an umbrella management system, said method comprising:

subscribing an adapter to an information bus to capture network management events;

formatting said events into an umbrella management system information by a converter in communication with said adapter;

conveying said umbrella system information to said umbrella management system by a forwarder in communication with said converter.

33. (New) A method for conveying data communications network management information to an umbrella management system, said method comprising:

subscribing to network management information events published on said information bus;

receiving said network management information events;

converting said network management information events into umbrella management system information useable by said umbrella management system; and

communicating said umbrella management system information to said umbrella management system.

34. (New) The method of claim 33 further comprising:

filtering said network management information events to communicate selected information in said events to said umbrella management system.

35. (New) The method of claim 34 further comprising:

publishing events on to said information bus.

36. (New) A method for conveying data communications network management information to an umbrella management system, said method comprising:

subscribing to network management information events published on said information bus;

receiving said network management information events;

converting said network management information events into umbrella management system information useable by said umbrella management system; and

communicating said umbrella management system information to said umbrella management system.